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Kezhi Qiao

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MORRIS MANNING MARTIN LLP  
3343 PEACHTREE ROAD, NE  
1600 ATLANTA FINANCIAL CENTER  
ATLANTA, GA 30326

EXAMINER

BERHANE, YOSIEF H

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/567,136 | <b>Applicant(s)</b><br>QIAO, KEZHI |  |
|                              | <b>Examiner</b><br>YOSIEF BERHANE    | <b>Art Unit</b><br>2419            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/29/2009</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-5, and 7 have been examined and are pending. Claim 6 has been cancelled by the applicant.

### **Response to Arguments:**

2. On pages 6-8 of Applicants Response, with regards to independent claim 1, applicant argues that the elements of **(a)** *“for a MEGACO signaling that is unconcerned with a media stream port of the media gateway, the agent equipment directly forwarding according to message identifier in the signaling”* **(b)** *As for the feature “if the MEGACO signaling is a signaling for creating a connection, further recording on the agent equipment a termination ID of the media gateway”* **(c)** *“a media gateway requesting register to the media gateway controller, and the agent equipment dynamically recording message identifier of the media gateway to be registered and network address by according to the register message”* **(d)** *“Agent equipment receiving the MEGACO signaling for establishing or modifying media stream port sent to the media gateway from the media gateway controller, establishing or modifying corresponding media stream forwarding port and forwarding table on the agent equipment”* **(e)** *“the media gateway controller sending a subtract signaling for releasing media stream port to the media gateway after calling finishes, the agent equipment releasing corresponding media stream forwarding port after receiving the signaling, and forwarding the signaling to corresponding media gateway”* are not expressly taught by Akman.

**The applicants’ arguments are persuasive but moot in light of new rejection.**

### ***Double Patenting***

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer.  
A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

2. Claim 1-5 and 7 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-5 of copending Application No. 10/568,702 (hereinafter Copending Application) and in further view of Patent 7,146,410 to Akman.

**As per claim 1**, a method for realizing signaling agent in a network system, the network system comprising (Claim 5, Copending application recites method for realizing signaling agent based on a media gateway control protocol)

media gateways and a media gateway controller in different networks (Claim 1, Copending application recites an agent equipment between media gateways and a media gateway controller that locate in different networks),

and at least one agent equipment on a boundary of different networks (Claim 1, Copending application recites: the agent equipment providing signaling agent and network address translation between (claimed boundary) different network)

where a MEGACO protocol is adopted between the media gateways and the media gateway controller (Claim 1, Copending application recites: a method for realizing signaling agent

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based on a media gateway control protocol, comprising: providing an agent equipment between media gateways and a media gateway controller),

a media gateway requesting register to the media gateway controller (Claim 3, Copending application recites: sending a request message for registering to the media gateway controller from the media gateway),

and the agent equipment dynamically recording message identifier of the media gateway to be registered (Claim 3, Copending application recites: recording message identifier of the media gateway received by the agent equipment to generate a piece of information about the media gateway)

step 2: for a MEGACO signaling that is unconcerned with a media stream port of the media gateway (Claim 1, Copending application recites: for a MGCP/MEGACO signaling sent from the media gateway to the media gateway controller, if not related-to media, directly replacing a transaction number by the agent equipment and then forwarding. Note, if the signaling is not related to media, it will not be concerned with a media stream port),

the agent equipment directly forwarding the signaling according to a message identifier in the signaling (Claim 1, Copending application recites: directly replacing a transaction number by the agent equipment and then forwarding according to domain name in endpoint identifier (claimed message identifier));

and step 3: for a MEGACO signaling that is concerned with the media stream port (Claim 5, Copending application recites: wherein the step of processing a MGCP/MEGACO signaling that is related to media by the agent equipment further comprises: creating or modifying a corresponding media forwarding port. Note, forwarding port for media will output a media

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stream, thus will modifying/creating a corresponding media forwarding port is concerned with a media stream port.),

the agent equipment processing media stream attributes correspondingly and then forwarding the signaling (Claim 1, Copending application recites: processing a media attribute correspondingly by the agent equipment and then forwarding),

according to the message identifier in the signaling (Claim 1, Copending application recites: forwarding according to domain name in endpoint identifier (claimed message identifier))

wherein step 3 further comprises the steps of: (1) the agent equipment receiving the MEGACO signaling for establishing or modifying media stream port sent to the media gateway from the media gateway controller, establishing or modifying corresponding media stream forwarding port and forwarding table on the agent equipment (Claim 5, Copending application recites: creating or modifying a corresponding media forwarding port and a forwarding table on the agent equipment after receiving a signaling for establishing or modifying a connection sent to a media gateway from the media gateway controller),

replacing relevant media information in the MEGACO signaling with corresponding network address information of media stream forwarding port on the agent equipment and forwarding the signaling to corresponding media gateway; (Claim 5, Copending application recites: wherein the step of processing a MGCP/MEGACO signaling comprises replacing relevant information on media in the signaling with information on corresponding network address of the media forwarding port on the agent equipment, and then forwarding the signaling to the media gateway),

(2) the media gateway processing MEGACO signaling received (Claim 5, Copending application recites: receiving a signaling for establishing or modifying a connection sent to a media gateway from the media gateway controller),

and returning a reply signaling (Claim 5, Copending application recites: the media gateway sends the media gateway controller the response signaling related to media.);

if the MEGACO signaling is a signaling for creating a connection, further recording on the agent equipment a termination ID of the media gateway (Claim 5, Copending application recites: if the signaling is a signaling for creating a connection, further recording on the agent equipment an endpoint identifier (claimed termination Id) of the connection);

(3) the agent equipment modifying forwarding table of corresponding media stream forwarding port according to the reply signaling received (Claim 5, Copending application recites: modifying the forwarding table of a corresponding media forwarding port on the agent equipment according to a response signaling when the media gateway sends the media gateway controller the response signaling related to media),

replacing media information in the signaling with corresponding network address information of media stream forwarding port on the agent equipment, and forwarding to the media gateway controller (Claim 5, Copending application recites: replacing media information in the response signaling with information on network address of corresponding media port on the agent equipment, and then sending to the media gateway controller);

and (4) the media gateway controller sending a subtract signaling for releasing media stream port to the media gateway after calling finishes (Claim 5, Copending application recites: sending a signaling for releasing the connection to the media gateway from the media gateway

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controller after calling finishes, releasing the corresponding media forwarding port on the agent equipment),

the agent equipment releasing corresponding media stream forwarding port after receiving the signaling, and forwarding the signaling to corresponding media gateway (Claim 5, Copending application recites: sending a signaling for releasing the connection to the media gateway from the media gateway controller after calling finishes, releasing the corresponding media forwarding port on the agent equipment according to the endpoint identifier, and then forwarding the signaling to the media gateway).

Copending Application does not disclose expressly: wherein the agent equipment has at least two network addresses: one being a first network address in a network of the media gateway controller and the other one being a second network address in a network of a media gateway side, and recording network address according to the register message;

Akman discloses in Fig. 2a, a firewall/Nat router (claimed agent equipment) with a first address 10.2.2.50 connected to a first IP network with a Media Gateway (MG) and a second address 175.17.4.1 connected to a second IP network with a Media gateway Controller (MGC). Further, Akman discloses in fig. 2a a service change message (claimed register message) sent from a media gateway to a media gateway controller, where as disclosed in box 220, the firewall/Nat receives the message and stores the IP address in a NAT table.

Akman and Copending Application are analogous art because they are from the same field of endeavor dealing specifically with managing control protocols between communication devices within different IP networks.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system of the Copending Application by including a signaling agent connected to two different networks and recording address information of signaling devices, as suggested by Akman.

The suggestion/motivation for doing so would have been to provide efficiency and reliability in communicating by allowing transparent routing solutions to end nodes that are resident on separate networks having different address schemes (Akman, Col. 2, lines 59-61)

Therefore, it would have been obvious to combine Akman with Copending Application for the benefit of providing efficient and reliable communication between end nodes, to obtain the invention as specified in claim 1.

**As per claim 2**, the combination of Copending Application and Akman disclose: wherein each media gateway under a same media gateway controller has a unique message identifier of the MEGACO signaling, and the media gateway controller distinguishes different media gateways by the message identifier (Claim 2, Copending application recites: each of all media gateways under control of same media gateway controller has different domain name, each endpoint identifier includes domain name information of a media gateway, and the media gateway controller distinguishes media gateways according to their domain names in the endpoint identifiers).

**As per claim 3**, the combination of Copending Application and Akman disclose wherein the message identifier of each MEGACO signaling sent from the media gateway controller to the

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media gateway comprises the message identifier of the media gateway, and the agent equipment forwards the signaling to a corresponding media gateway according to the message identifier (Claim 2, Copending application recites: each of all media gateways under control of same media gateway controller has different domain name, each endpoint identifier includes domain name information of a media gateway, and the media gateway controller distinguishes media gateways according to their domain names in the endpoint identifiers).

**As per claim 4**, the combination of Copending Application and Akman disclose wherein the IP address and port of the media gateway controller configured on the media gateway are same as the second network address and port of the agent equipment (Fig. 2a, Akman discloses a firewall/NAT router includes a port having an IP address on a first IP network for receiving a control protocol message from a media gateway having an IP address on the first IP network, where, as disclosed in Fig. 1a, the MGC (media gateway controller) and the MG (media gateway) have the same IP network address, where both the MGC and MG are connected to the same IP network through the same port of the NAT router having the same IP network address.).

**As per claim 5**, the method for realizing signaling agent of claim 1, wherein the registering procedure of step 1 comprises the steps of: 1) the media gateway sending the register message to the media gateway controller (Claim 3, Copending application recites: sending a request message for registering to the media gateway controller from the media gateway),

the agent equipment receiving the message on the second network address and corresponding port (Fig. 2a, Akman discloses a service change message sent from a media

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gateway and forwarded to a Media gateway controller on a second IP network (claimed second network address) via a second port (claimed corresponding port)),

recording an IP source address (Fig. 2a, Akman discloses storing an IP address of the media gateway in the NAT table),

port number (Claim 5, Copending application recites: creating (claimed recording) or modifying a corresponding media forwarding port)

and message identifier of the media gateway sending the message and generating a piece of information of the media gateway; (Claim 3, Copending application recites: recording message identifier of the media gateway received by the agent equipment to generate a piece of information about the media gateway),

2) the agent equipment forwarding the registering message to the media gateway controller through the first network address (Claim 3, Copending application recites: assigning by the agent equipment a new transaction number to the request message; recording the media gateway sending the request, and then forwarding the request message for registering to the media gateway controller);

3) the media gateway controller registering the media gateway according to the domain name thereof (Claim 3, Copending application recites: wherein the step of requesting for registering to the media gateway controller from a media gateway further comprises: sending a request message for registering to the media gateway controller from the media gateway, and recording message identifier (claimed domain name) of the media gateway.),

after registering successfully, the media gateway controller returning a reply signaling to the media gateway (Claim 3, Copending Application recites: registering the media gateway

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successfully, and then sending a response message for registering to the media gateway from the media gateway controller),

the message identifier of the reply signaling including information on domain names of the media gateway (Claim 5, Copending Application recites: when the media gateway sends the media gateway controller the response signaling, replacing media information (claimed message identifier) in the response signaling with information on network address (claimed domain) of corresponding media port on the agent equipment)

and the media gateway controller (Col. 4, Akman discloses that the MGC responds with a Service Change Reply message containing its IP address (claimed domain name).);

and 4) the agent equipment receiving the reply signaling from the first network address (Claim 4, Copending application recites: after receiving on the agent equipment a response message for the request message sent by the media gateway controller. Note, the media gateway controller and media gateway, as specified in claim 1, reside on different networks, thus there will be a first and second network address),

analyzing the domain name of the media gateway in the signaling (Col. 4, lines 48-50, Akman discloses The MEGACO/NAT server inspects (claimed analyze) any IP addresses (claimed domain name) contained in the message (claimed signaling)),

searching and obtaining address of the media gateway from information recorded (Col. 5, lines 21-23, Akman discloses The NAT functionality in the firewall creates (claimed recorded) and maintains a NAT table that links (claimed searching and obtaining) addresses in the 10.X.X.X domain and the (175.X.X.X) domain.),

and forwarding to corresponding media gateway from the second network address (Fig. 2a, Akman discloses a service change reply message sent from a media gateway controller and forwarded to a Media gateway controller from a second IP network (claimed second network address) via a second port).

**As per claim 7**, the combination of Copending Application and Akman disclose wherein step 3) further comprises the steps of: if the signaling received by the agent equipment is the reply signaling of establishing media stream port (Claim 5, Copending application recites: wherein the step of processing a MGCP/MEGACO signaling that is related to media by the agent equipment further comprises: creating or modifying a corresponding media forwarding port (claimed media stream port), if the signaling is a signaling for creating a connection, modifying the forwarding table of a corresponding media forwarding port on the agent equipment according to a response signaling),

recording a termination ID of the media stream port of the media gateway MG on the agent equipment (Claim 5, Copending application recites: if the signaling is a signaling for creating a connection, further recording on the agent equipment an endpoint identifier (claimed termination Id) of the connection. Note the connection is established between two endpoints, an MG and MGC, thus the endpoint identifier will be recorded for an MG.),

and determining media stream forwarding port for releasing according to the termination ID (Claim 5, releasing the corresponding media forwarding port on the agent equipment according to the endpoint identifier).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yosief Berhane whose telephone number is (571) 270-7164. The examiner can normally be reached at 9:00-6:00 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached at (571) 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/YOSIEF BERHANE/

Examiner, Art Unit 2419

/Pankaj Kumar/

Supervisory Patent Examiner, Art Unit 2419